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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/837,714	04/18/2001	Daniel A. Japuntich	48317USA3M.032	9172
32692 7590 03/22/2007 3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			EXAMINER BRANDT, ADAM CURTIS	
			ART UNIT 3771	PAPER NUMBER
			NOTIFICATION DATE 03/22/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

09/837,714

Applicant(s)

JAPUNTICH ET AL.

Examiner

Adam Brandt

Art Unit

3771

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 28 February 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☒ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 33, 35-42, 44, 46, 49, 50, 55-59 and 64-66.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.



JUSTINE R. YU

SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700

3/1/07

Continuation of 3. NOTE: Presently claims 33,35-42,44,46,49,50,55-59, and 64-66 are pending in the application. Applicant's arguments filed 2/28/2007 have been fully considered but they are not persuasive.

Applicant argues that the rejection made under 35 U.S.C. 103(a) Simpson et al. (GB 2,072,516) in view of Cover (2,105,183) and Soderberg (EP 0252890) is not proper because there is no teaching for such a combination in the references. Simpson discloses a cantilevered flexible flap assembly in figure 2. Simpson does not show the flexible flap assembly in a closed state with a curved profile in a cross sectional view. Cover teaches a single flexible flap with a curved profile that meets the limitations of the claims. The motivation to make such a combination comes directly from Cover's disclosure. Cover recites, "...it is desirable to have as efficient closing action and closing registration between the movable element and the apertures of the base plate as is possible, so as to seal off the outside air as much as possible and of course it is also desirable to have as efficient an opening action of the valve as is possible. By the arrangement of my preferred form with the features of the concave oval base and the arrangement of the hinging means, I have accomplished a highly improved valve structure." (underline added for emphasis). Cover acknowledges that the concave base improves the performance of the device in conjunction with movable element and the apertures. These benefits provide the motivation to combine Simpson et al. and Cover.

Applicant argues that Cover does not improve the closing action of the valve. The Applicant has provided evidence to discredit the statements made by Cover. Testing between the present invention and a valve similar to Cover was conducted that concluded that the present invention could function at a lower pressure drop and provided lower airflow resistance. The Examiner contends that the data provided by the applicant is for a comparison between the present invention and the device of Braun. The Applicant is supposing that because of the general operating similarities of Braun's valve and Cover's valve, it is adequate to believe the two valves will function similarly enough to draw a clear conclusion. The Examiner believes that such an experiment provides inconclusive evidence because a valve that shares few operational characteristics in a not an equivocal substitute for the actual valve as taught by Cover.

The Applicant argues that Braun's disclosure presents the state of the art and that Braun acknowledges that prior art has struggled to display a dual flap system mounted at one end. The Applicant surmises that such an arrangement has troubles in retaining the flap in a closed position in any orientation. The Applicant quotes from column 3, lines 40-43, "...If the flap is too long, it might not have sufficient resilience to become quickly seated to resist extraneous unseating forces." Focusing on the preceding lines 36-40, Braun states, "To attain the lowest pressure drop across a novel valve which has been constrained in width by the space between cheek filters, the orifice and flap are usually as long as possible within the available frontal area, thus minimizing the pressure drop." The Examiner interprets Braun's disclosure as being cautionary advice in the design of such a valve. Braun does not say that it is not possible to design a valve that is longer than any ordinary valve, but warns that too long a flap may not have the required resilience to return to a closed position. Additionally, the dimension of the flap is relative to that of the valve opening. A smaller valve opening will require a smaller flap that in relation to a typical flap would not be considered "too long". While one of ordinary skill in the art can appreciate Braun's design advice, it should not be considered to be the definitive teaching of valve technology at the time the of the invention.

Applicant argues that Cover does not disclose the claimed structure. The Examiner takes the position that when interpreted broadly, the rejection found in office action dated 12/28/2006 meets the limitations of the claim.

Applicant argues that Simpson does not lend itself to be modified by Cover and that Simpson teaches away from any such combination. The Examiner acknowledges the deficiencies of Simpson. Simpson includes the antechamber as a measure to prevent the breathing of toxic gas. Such a deficiency is ideal motivation to modify Simpson with the teachings of Cover. If Simpson's flexible valve does in fact lack the resilience required to remain closed in any orientation, Cover provides the obvious improvement to remedy the alleged non-resilient valve. The Applicant argues that Cover's centrally located mounting system is problematic in that if the flexible flap was mounted on one side, the valve would fail to function. The claim limitation requires the valve to be non-centrally located. This limitation does not require the flap to be at one side of the valve system. Therefore, if the mounting system of Cover was moved slightly off center, which most likely could be done without greatly affecting the performance of the valve, then it would no longer be centrally located. Once again, it is the office's position that the Examiner interprets all claims as broadly as possible. Therefore, the rejection is deemed proper.

As to the Applicant's arguments directed towards the combination including Soderberg, Soderberg is teaching a beveled edge that improves the ability of a valve to seal. This is only an improvement to the modified Simpson combination and such a feature is well known in the art. Braun discloses a beveled edge (18, column 3, lines 3-5) to increase the valves proficiency for creating a secure relationship. One of ordinary skill in the art would appreciate the inclusion of a beveled edge in a flap type valve since it has been established that such a feature is routinely added to increase the sealing performance of the valve.

The Applicant argues that the Examiner has selectively chosen elements to assemble an amalgam of ideas that meets the limitations of the claims. The Examiner has shown motivation to combine Simpson and Cover, and additionally Soderberg. The proposed combination suggested by the Examiner does meet the limitations of the claims when interpreted broadly. Braun's teaching are considered relevant to the state of the art at the time of the invention, but is not considered to be the definitive teaching of all known valve technology. The Examiner believes that the combination of references does not selectively pick needed elements, but considers the references as a whole.

The rejection is maintained..